

Title (en)

APPARATUS AND METHOD FOR SPIN FORMING A WORKPIECE BY A STREAM OF PRESSURIZED FLUID

Title (de)

VORRICHTUNG UND VERFAHREN ZUM SPINFORMEN EINES WERKSTÜCKS MITTELS EINES UNTER DRUCK STEHENDEN FLÜSSIGKEITSSTROMS

Title (fr)

APPAREIL ET PROCÉDÉ POUR LE TOURNAGE CENTRIFUGE D'UNE PIÈCE GRÂCE À UN FLUX DE FLUIDE SOUS PRESSION

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Application

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Abstract (en)

[origin: GB2507364A] A method for deforming a tubular work piece 12 comprises supporting the tubular work piece 12, rotating the tubular work piece 12 about its longitudinal axis X, directing a stream of pressurised fluid at the tubular work piece 12 from a nozzle 20 in a direction transverse to the longitudinal axis X and moving one or both of the tubular work piece 12 and the nozzle 20 relative to one another such that the stream of pressurised fluid can be aimed at a plurality of locations along the tubular work piece 12, the pressure of the fluid directed at the tubular work piece 12 being great enough to cause deformation of the tubular work piece, but not so great that cutting of the tubular work piece 12 can occur. The deformation may be localised compression reducing the thickness of the workpiece 12 and forcing it along the support 16. The method is akin to conventional flow forming that uses rollers. Several nozzles 20, 32, 34 may be provided and may be moved parallel to axis X and transverse to axis X. The tubular work piece 12 may be mounted on a support 16 such as a shaft or a mandrel on a lathe 14 using a clamp 18.

IPC 8 full level

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